# Breeding Bird and Nightjar Survey Summary Report Bayfield County Forest Units 2, 3, 4 and 5



Project Initiated by: Bayfield Co. Forestry Dept. - Washburn, WI



Survey Conducted by and Report Prepared by: Endangered Resource Services, LLC Matthew S. Berg, Research Biologist St. Croix Falls, Wisconsin June 12-July 2, 2011

# **Introduction and Methods:**

I conducted 275 Breeding Bird Survey unlimited point counts, and 51 nightjar point counts in the Bayfield Co. Forest's Units 2,3, 4 and 5 from June 12 to July 2, 2011. Twenty eight of these points (in the greater Barnes area) were repeat surveys in an area where several Kirtland's Warblers (*Dendroica kirtlandii*) were detected in 2010. A total of 11 land classifications in various stages of succession were surveyed. These units are actively managed by a variety of methods including selective and clear cut timber harvest, tree planting, and mechanical and chemical brush removal. The goals of the surveys were to develop a greater understanding of the density and distribution of birds in the county, understand how various management practices may be impact breeding birds, and identify areas of critical habitat for rare species within the county's forests.

Breeding Bird Survey methods generally followed the protocol established by Howe et al (1997). Points were predetermined by the Bayfield County Forestry Department and located by GPS (Garmin 76CSX) and compass. Surveys started at first light and ideally extended to approximately 10:00. However, due to the remote nature of many of this year's points, I continued surveying along a leg until I reached its conclusion. Occasionally, this took us to times past 11:00. Surveys were not conducted when winds were >12mph and affected bird detection or when there was precipitation. I recorded all birds seen and heard at each point during the 10 minute count period, noted the minute (1-10) each was first detected, and estimated the distance to each bird (25, 50 100 or >100m). Basic habitat metrics including tree and shrub species present, percent canopy cover, percent conifer over and understory and percent deciduous shrub understory were noted. Temperature, wind speed and sky condition were also recorded.

Nightjar surveys followed the methods establish by the Wisconsin Breeding Bird Initiative (Paulios, 2008). Survey points were established along a predetermined route at 1 road mile intervals. I listened for six minutes for nightjars at each site. Other nocturnal calling birds like owls, cuckoos, etc. were also noted. If birds were detected, I documented each minute(s) they were calling separately. Site description, location, number of houses, background noise, passing cars, wind, sky conditions, and up to three dominant habitat descriptors (open, pine forest, hardwood forest, marsh/wetland and water) were also recorded. Surveys started after sunset and once the moon was above the horizon and at least ½ full. Surveys ended after the moon set or before sunrise. All data was subsequently entered into an Excel spreadsheet for later analysis.

# **Results and Species Summaries:**

I documented a total of 4,213 birds during the morning BBS representing 92 species for a mean of 15.32 birds/plot (Table 1). Red-eyed Vireo (*Vireo olivaceus*), Ovenbird (*Seiurus aurocapillus*), Nashville Warbler (*Vermivora ruficapilla*), and Veery (*Catharus fuscescens*) were the most abundant species making up 13.32%, 13.03%, 5.22% and 4.77% of the breeding bird community respectively (Figure 1). Nine other species made up at least 2% of birds surveyed. They included Chestnut-sided Warbler (*Dendroica pensylvanica*), Hermit Thrush (*Catharus guttatus*), American Robin (*Turdus migratorius*), Black-throated Green Warblers (*Dendroica virens*), Least Flycatcher (*Empidonax minimus*), Rose-breasted Grosbeak (*Pheucticus ludovicianus*), American Crow (*Corvus brachyrhynchos*) Eastern Wood-Peewee (*Contopus virens*), and Blue Jay (*Cyanocitta cristata*).

# Table 1: Breeding Bird Community Forestry Units 2, 3 and 5, Bayfield County June 12-July 2, 2011

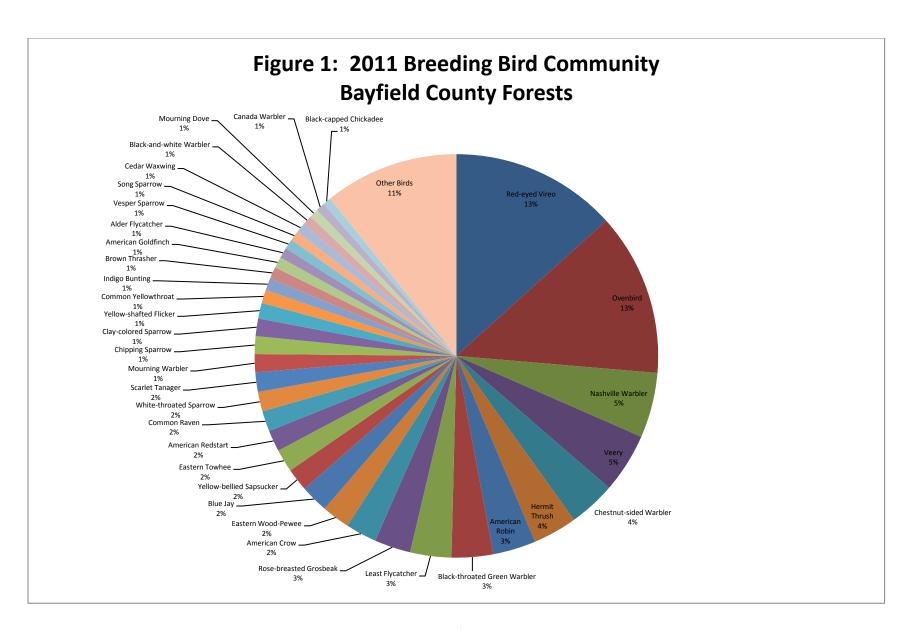
Common Name	Scientific Name	Total Number	Mean # Per Site	% of Community
Red-eyed Vireo	Vireo olivaceus	561	2.040	13.32%
Ovenbird	Seiurus aurocapilla	549	1.996	13.03%
Nashville Warbler	Vermivora ruficapilla	220	0.800	5.22%
Veery	Catharus fuscescens	201	0.731	4.77%
Chestnut-sided Warbler	Dendroica pensylvanica	158	0.575	3.75%
Hermit Thrush	Catharus guttatus	149	0.542	3.54%
American Robin	Turdus migratorius	145	0.527	3.44%
Black-throated Green Warbler	Dendroica virens	140	0.509	3.32%
Least Flycatcher	Empidonax minimus	139	0.505	3.30%
Rose-breasted Grosbeak	Pheucticus ludovicianus	122	0.444	2.90%
American Crow	Corvus brachyrhynchos	105	0.382	2.49%
Eastern Wood-Pewee	Contopus virens	95	0.345	2.25%
Blue Jay	Cyanocitta cristata	94	0.342	2.23%
Yellow-bellied Sapsucker	Sphyrapicus varius	77	0.280	1.83%
Eastern (Rufous-sided) Towhee	Pipilo erythrophthalmus	77	0.280	1.83%
American Redstart	Setophaga ruticilla	72	0.262	1.71%
Common Raven	Corvus corax	69	0.251	1.64%
White-throated Sparrow	Zonotrichia albicollis	66	0.240	1.57%
Scarlet Tanager	Piranga olivacea	66	0.240	1.57%
Mourning Warbler	Oporornis philadelphia	61	0.222	1.45%
Chipping Sparrow	Spizella passerina	60	0.218	1.42%
Clay-colored Sparrow	Spizella pallida	59	0.215	1.40%
Yellow-shafted Flicker	Colaptes a. auratus	53	0.193	1.26%
Common Yellowthroat	Geothlypis trichas	45	0.164	1.07%
Indigo Bunting	Passerina cyanea	41	0.149	0.97%
Brown Thrasher	Toxostoma rufum	40	0.145	0.95%
American Goldfinch	Spinus tristis	38	0.138	0.90%
Alder Flycatcher	Empidonax alnorum	35	0.127	0.83%
Vesper Sparrow	Pooecetes gramineus	34	0.124	0.81%
Song Sparrow	Melospiza melodia	34	0.124	0.81%
Cedar Waxwing	Bombycilla cedrorum	33	0.120	0.78%
Black-and-white Warbler	Mniotilta varia	33	0.120	0.78%
Mourning Dove	Zenaida macroura	31	0.113	0.74%
Canada Warbler	Wilsonia canadensis	29	0.105	0.69%
Black-capped Chickadee	Poecile atricapillus	28	0.102	0.66%
Red-breasted Nuthatch	Sitta canadensis	28	0.102	0.66%
Yellow-bellied Flycatcher	Empidonax flaviventris	23	0.084	0.55%
Yellow-rumped (Myrtle) Warbler	Dendroica coronata	23	0.084	0.55%
Blackburnian Warbler	Dendroica fusca	23	0.084	0.55%
Great Crested Flycatcher	Myiarchus crinitus	22	0.080	0.52%
Hairy Woodpecker	Picoides villosus	18	0.065	0.43%
Ruffed Grouse	Bonasa umbellus	17	0.062	0.40%
Wood Thrush	Hylocichla mustelina	16	0.058	0.38%

# Table 1 (cont'): Breeding Bird Community Forestry Units 2, 3 and 5, Bayfield County June 12-July 2, 2011

Ruby-throated Hummingbird	Common Name	Scientific Name	Total Number	Mean # Per Site	% of Community
Northern Waterthrush	Ruby-throated Hummingbird		15	0.055	0.36%
Northern Waterthrush   Seiurus noveboracensis   14   0.051   0.33%     Pileated Woodpecker   Dryocopus pileatus   13   0.047   0.31%     Golden-winged Warbler   Dendroica pinus   13   0.047   0.31%     Swainson's Thrush   Catharus usulatus   12   0.044   0.28%     Palm Warbler   Dendroica Pinus   12   0.044   0.28%     Palm Warbler   Dendroica Pinus   12   0.044   0.28%     Black-billed Cuckoo   Coccyus erythropthalmus   11   0.040   0.26%     Winter Wren   Troglodytes troglodytes   11   0.040   0.26%     Connecticut Warbler   Oporomis agilis   11   0.040   0.26%     Brown-headed Cowbird   Molothrus ater   9   0.033   0.21%     Yellow-throated Vireo   Vireo flavifrons   8   0.029   0.19%     Red-winged Blackbird   Agelaius phoeniceus   8   0.029   0.19%     Red-winged Blackbird   Agelaius phoeniceus   8   0.029   0.19%     Rastern Kingbird   Tryamus tryamus   7   0.025   0.17%     Eastern Kingbird   Sialia Sialis   7   0.025   0.17%     Magnolia Warbler   Dendroica magnolia   7   0.025   0.17%     Magnolia Warbler   Dendroica magnolia   7   0.025   0.17%     Yellow-billed Cuckoo   Coccyus americanus   6   0.022   0.14%     White-breasted Nuthateh   Sita carolinensis   6   0.022   0.14%     Red Crossbill   Loxia curvirostra   4   0.015   0.09%     Gray Catbird   Dumetella carolinensis   4   0.015   0.09%     Gray Catbird   Dumetella carolinensis   3   0.011   0.07%     Field Sparrow   Spicella pusilla   3   0.011   0.07%     Field Sparrow   Spicella pusilla   3   0.011   0.07%     Food Sparrow   Spicella pusilla   3   0.011   0.07%     Food Sparrow   Spicella pusilla   3   0.011   0.07%     Broad-winged Hawk   Buteo platypterus   2   0.007   0.05%     Broad-winged Hawk   Buteo platypterus   2   0.007   0.05%     Golden-crowned Kinglet   Regulus sarapa   2   0.007   0.05%     Golden-crowned Kinglet   Regulus sarapa   2   0.007   0.05%     G	Swamp Sparrow	Melospiza georgiana	15	0.055	0.36%
Golden-winged Warbler   Vermivora chrysoptera   13   0.047   0.31%			14	0.051	0.33%
Golden-winged Warbler   Vermivora chrysoptera   13   0.047   0.31%	Pileated Woodpecker	Dryocopus pileatus	13	0.047	0.31%
Pine Warbler			13	0.047	
Swainson's Thrush         Catharus ustulatus         12         0.044         0.28%           Palm Warbler         Dendroica Palmarum         12         0.044         0.28%           Black-billed Cuckoo         Cocyzus erythropthalmus         11         0.040         0.26%           Winter Wren         Troglodytes troglodytes         11         0.040         0.26%           Connecticut Warbler         Oporornis agilis         11         0.040         0.26%           Brown-headed Cowbird         Molothrus ater         9         0.033         0.21%           Yellow-throated Virco         Vireo flavifrons         8         0.029         0.19%           Northern Parula         Parula americana         8         0.029         0.19%           Red-winged Blackbird         Agelaius phoeniceus         8         0.029         0.19%           Eastern Kingbird         Tyrannus tyrannus         7         0.025         0.17%           Eastern Bluebird         Sialia Sialis         7         0.025         0.17%           Magnolia Warbler         Dendroica magnolia         7         0.025         0.17%           Brewer's Blackbird         Euphagus cyanocephalus         7         0.025         0.17%           Yello		• •	13	0.047	0.31%
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Connecticut Warbler         Oporomis agilis         11         0.040         0.26%           Brown-headed Cowbird         Molothrus ater         9         0.033         0.21%           Yellow-throated Vireo         Vireo flavifrons         8         0.029         0.19%           Northern Parula         Parula americana         8         0.029         0.19%           Red-winged Blackbird         Agelaius phoeniceus         8         0.029         0.19%           Purple Finch         Carpodacus purpureus         8         0.029         0.19%           Eastern Kingbird         Tyrannus tyrannus         7         0.025         0.17%           Eastern Bluebird         Sialia Sialis         7         0.025         0.17%           Magnolia Warbler         Dendroica magnolia         7         0.025         0.17%           Brewer's Blackbird         Euphagus cyanocephalus         7         0.025         0.17%           Yellow-billed Cuckoo         Coccycus americanus         6         0.022         0.14%           Yellow-billed Cuckoo         Coccycus americanus         6         0.022         0.14%           Red Crossbill         Loxia curvirostra         6         0.022         0.14%           Red Crossbi	Black-billed Cuckoo	Coccyzus erythropthalmus	11	0.040	0.26%
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	Common Nighthawk	Chordeiles minor	1	0.004	0.02%

# Table 1 (cont'): Breeding Bird Community Forestry Units 2, 3 and 5, Bayfield County June 12-July 2, 2011

Common Name	Scientific Name	Total Number	Mean # Per Site	% of Community
Barn Swallow	Hirundo rustica	1	0.004	0.02%
House Wren	Troglodytes aedon	1	0.004	0.02%
Black-throated Blue Warbler	Dendroica caerulescens	1	0.004	0.02%
Baltimore Oriole	Icterus galbula	1	0.004	0.02%
White-winged Crossbill	Loxia leucoptera	1	0.004	0.02%
Evening Grosbeak	Coccothraustes vespertinus	1	0.004	0.02%



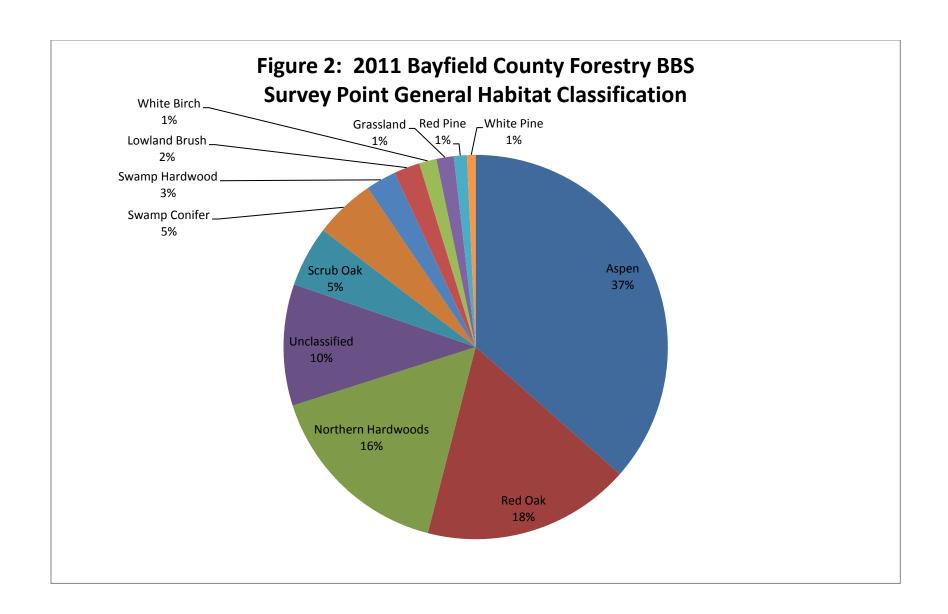
The 2011 BBS points covered a wide geographic area and were distributed across 11 general habitat types including Aspen, Red Oak, Northern Hardwoods, Northern Pin "Scrub" Oak, Swamp Conifers, Swamp Hardwoods, Lowland Brush, White Birch, Grassland, Red Pine, and White Pine (Figure 2). The 28 Kirtland's Warbler points were unclassified although they were primarily in Jack Pine, Red Pine and Grassland areas.

This wide variety of cover types provided suitable habitat for 92 different species. This total tied the number of species from the 2008 survey, was three better than the 89 species detected in 2010 and ten better than the 82 detected in 2009. Yellow-billed Cuckoo (*Coccyzus americanus*), Northern Harrier (*Circus cyaneus*) and Olive-sided Flycatcher (*Contopus cooperi*) were the only species not detected in previous years.

I did not locate any evidence of Kirtland's Warblers despite exhaustive efforts in the areas identified as holding birds in June 2010. As in 2010, I started the mornings of June 12 and 14 with a 40+ minute passive listening session on the roads adjacent to where the birds were reported. I also quietly and slowly walked transects from survey point to survey point within the area.

During my three nights of surveys, I located at least 79 nightjars. Five were Common Nighthawks (*Chordeiles minor*) while the rest were Whip-poor-wills (*Caprimulgus vociferous*). I also documented 14 Barred Owl (*Strix varia*).

This year's routes ran through Forestry Units 2, 3 and 4 in mostly uninhabited areas with little artificial light or noise pollution. Whip-poor-wills detected during the routes were primarily located in open pine forests and clear cut habitats. Nighthawks were almost exclusively found in the most open areas (generally clearcuts), while the Barred Owls were typically located on the edges of deciduous forests.



Summaries based on personal observations and field notes taken at and between points.

## Alder Flycatcher ALFL 4661

I found Alder Flycatchers occupying territories in just about any open "brush" habitat; especially near water and in young aspen clear cuts.

#### **American Crow AMCO 4880**

Crows weren't abundant with the exception of the one point where I came upon a "murder" of at least 60 birds that had apparently roosted there for the night.

#### American Goldfinch AMGO 5290

Goldfinches were regularly encountered foraging and flying over just about any open habitat.

#### **American Redstart AMRE 6870**

American Redstarts were regularly encountered in middle-aged aspen with canopy gaps that created a vertical component. They were absent from the driest sites and seemed to prefer >50% hazel understory.

#### **American Robin AMRO 7610**

Robins were found in almost any habitat if there were conifers for them to nest in. They were especially common in open mixed forests that had at least some Balsam Fir in the understory. They were also very common in Jack Pine stands in the Kirtland's Warbler Sites.

#### American Woodcock AMWO 2280 - SGCN/Special Concern

I flushed Woodcock on a regular basis while walking through 30-40+ft young aspen stands on moist sites that had leaf litter.

#### **Baltimore Oriole BAOR 5070**

I saw a sigle Baltimore male singing in one of the Kirtland's Warbler Sites in a "park land" area with a few 40ft deciduous trees over scattered brush clusters.

#### **Barn Swallow BARS 6130**

I saw a single Barn Swallow foraging over one of the Kirtland's Warbler Sites.

#### Barred Owl BADO 3680

Although not found on any of the BBS points, I documented 14 birds on the nightjar surveys – primarily adjacent or in deciduous forests.

#### Black-and-white Warbler BAWW 6360

I again observed Black-and Whites on a regular basis in early-successional, dry deciduous and mixed forests. I again found BAWWs occupying dry/poorer quality regenerating sites than other warblers. Dense Northern Pin Oak and Red Maple grubs mixed with young Large-tooth Aspen often held few other species.

# Black-billed Cuckoo BBCU 3880 - SGCN/Special Concern

Black-bills were again common in the Kirtland's Warbler area in brushy thickets. I also heard them in scattered brushy edges of aspen forests.

#### Blackburnian Warbler BLBW 6620

Blackburnians occurred in a variety of conifer areas, but they were only reliably found in areas that had canopied/supercanopied White Pine trees with a deciduous understory/well developed brush component and in mature Tamarack bogs with limited openings. Males were often singing from the upper branches and were difficult to locate even with spishing.

#### Black-capped Chickadee BCCH 7350

A common resident found in just about any forest habitat, Chicks seem to prefer at least some conifers.

#### Black-throated Blue Warbler BTBW 6540 SGCN/Special Concern

I only heard one BTBW on point and one additional birds interpoint (in the same general area on regenerating Sugar Maple following a moderate selective cut ). Birds were again restricted to the specific microhabitat we identified in the past – Sugar Maples, gaps, slope and a variable canopy layer. Areas fitting this description were again rare in this year's surveys, but, when I found them, each held a bird. Interestingly, both times I found them, I predicted they would be in the location before I heard them. At least in Bayfield County, these birds are very much a habitat specialist with limited areas to colonize.

#### Black-throated Green Warbler BTNW 6670

Black-throated Green Warblers were common to very common anywhere there were Sugar Maples and Sugar Maples mixed with conifers. They seemed to be more common in areas that had limited brush in the understory.

#### Blue-headed (Solitary) Vireo BHVI 6290

I only heard a handful of Blue-headeds this year. These birds were in mixed forests with conifers (Balsam Fir and Red Pine) in the overstory.

# Blue Jay BLJA 4770

Blue Jays thrive just about anywhere there are some mature trees. They were most often encountered in open oak and maple forests. Many birds were found in the Kirtland's Warbler Sites.

#### **Brewer's Blackbird BRBL 5100**

Brewer's Blackbird was seen foraging and occasionally defending territory in recent clear cuts and in dry open areas

# **Broad-winged Hawk BWHA 3430**

I found Broad-wings in a variety of habitats that offered open understory/open edges for them to hunt. They were especially common along old logging roads through maturing forest.

#### **Brown Creeper BRCR 7260**

I only found Creepers at three sites this year, but all had some pine or spruce component.

#### **Brown Thrasher BRTH 7050 – SGCN/Special Concern**

Thrashers were abundant in young pine plantations with trees <15ft tall or where there were significant open areas between trees. They were especially common in the Kirtland's Warbler Sites along with Vesper and Field Sparrows and Eastern Towhees. I also found them in dry upland sites with abundant brush and no overstory trees following clear cuts.

#### **Brown-headed Cowbird BHCO 4950**

Cowbirds were relatively common in open country areas – especially in the Kirtland Warbler Sites. As with other KIWA sites in Wisconsin and Michigan, Cowbird control would likely be needed if Kirtland's eventually establish in the area.

#### Canada Warbler CAWA 6860 - SGCN/Special Concern

I regularly encountered Canada Warblers in complex brushy gaps in and on the edges of deciduous forests. They seemed especially common on slopes in areas that were either moist-wet or near water. Ash trees also seemed to be a strong predictor of Canada presence.

# Cedar Waxwing CEDW 6190

I observed Cedar Waxwings in almost any open and semi-open habitat. During June, pairs and small flocks seem to be very nomadic across the landscape, and many more birds were flyovers rather than actively utilizing the immediate area I was surveying in.

#### Chestnut-sided Warbler CSWA 6590

Where there were young aspen groves with soft edges there were Chestnut-sided Warblers. They also occurred in clear and selective cut areas with brush patches, and in mature aspen and Sugar Maple forests with a brush understory as long as the canopy wasn't completely closed such as along logging roads or in windthrow areas. Hazel seems to be an important species for Chesties – they were absent in areas where Hophornbeam was the dominant species of brush.

#### **Chipping Sparrow CHSP 5600**

Chipping Sparrows occurred in a variety of stands containing conifers. I found several males in midstory Red Pine plantations and in areas with scattered Balsam Fir. The majority of birds were in the Kirtland Warbler Sites.

# Clay-colored Sparrow CCSP 5610

Clay-coloreds were abundant and, during 2011, exclusively found in the Kirtland Warbler Sites. They especially liked young pines <15ft. in dry open habitats where they were frequently found with Brown Thrashers and other sparrow species.

#### **Common Grackle COGR 5110**

Grackles were most often seen as flyovers in areas with pine and lowland brush.

# Common Nighthawk CONI 4200

A few Nighthawks were heard in open areas associated with pines or in very recent clear cuts during the nightjar surveys with one additional bird picked up during the first point of the morning on a dry Jack Pine site. They seem to be fussier about habitat selection than their most common associate, Whip-poor-wills.

#### Common Raven CORA 4860

Ravens were regularly heard flying over plots. They were especially common in open country areas.

#### **Common Yellowthroat COYE 6810**

I found Yellowthroats in moist to wet alder and aspen openings, and in willow clusters in drier locations. The majority of birds this year were found in the Kirtland Warbler Sites.

## Connecticut Warbler CONW 6780 - SGCN/Special Concern

Connecticut Warblers were heard in mature and over-mature closed canopy Jack Pine forests along the periphery of the Kirtland's Warbler sites. I didn't hear a single bird anywhere else during 2011.

#### Downy Woodpecker DOWP 3940

I saw only two Downies - Both of which occurred in/at the edge of oak forests.

#### Eastern Bluebird EABL 7660

I found Bluebirds in open county sites where there was no canopy cover and little ground cover. Most birds were in the Kirtland's Warbler areas.

# Eastern Kingbird EAKI 4440

Kingbirds were associated with the open country of the Kirtland's Warbler Sites as well as areas around beaver ponds where they had dead or dying trees to serve as sallying perches.

#### Eastern Wood-Pewee EAWP 4610

Pewees were common in most closed canopy forests if there was an open understory and dead branches to serve as sallying perches. They were a regular occupant of mature Red Oak forests. Least Flycatchers were their most reliable associate along with Hermit Thrushes, and Scarlet Tanagers.

# **Evening Grosbeak EVGR 5140 Special Concern**

A single male was seen on a flyover.

## Field Sparrow FISP 5630 SGCN/Special Concern

I found a few Field Sparrows in the Kirtland Warbler Sites on the driest most open grassland areas that had just a few brush patches.

# **Golden-crowned Kinglet GCKI 7480**

The only two Golden-crowned Kinglets I heard were in mature black spruce and tamarack bogs where the trees were over 40ft high.

#### Golden-winged Warbler GWWA 6420 - SGCN/Special Concern

Golden-wings were again confined to areas with active aspen sucker growth following clear cut or aspen forest edges that had a soft, heterogeneous edge rather than a sharp drop off to nothing or non-aspen brush. I also found birds in most alder patches around beaver ponds and in open spruce/tamarack bogs with non-ericaceous brush edges.

#### **Gray Catbird GRCA 7040**

I found Catbirds in a few young regenerating aspen clear cuts, and in lowland brush areas near beaver ponds.

#### **Great-crested Flycatcher GCFL 4520**

Great-cresteds were scattered in mesic closed canopy areas that had open understory. They seemed more common in areas that had mature to over-mature Quaking Aspen.

#### **Great-horned Owl HGOW 3750**

I heard a single Great-horned Owl in a dry open oak/maple forest at dawn.

#### Hairy Woodpecker HAWO 3930

I again detected Hairy Woodpeckers scattered throughout a variety of habitats. The only regular areas that seemed to hold them were open Red Oak forests.

#### **Hermit Thrush HETH 7590**

A thrush of dry to moist forests, the highly detectable Hermit Thrush was found throughout in any closed or nearly closed canopy forests.

#### House Wren HOWR 7210

I heard a single House Wren in the Kirtland's Warbler areas.

#### **Indigo Bunting INBU 5980**

Indigo Buntings occurred at scattered locations in generally dry habitat on the edges of open aspen areas and regenerating oak selective cuts. Most of the birds I heard this year were fund in shrubs just off logging roads or in regenerating clear-cuts with grubs/suckers that weren't much over head high.

# Least Flycatcher LEFL 4670 – SGCN/Special Concern.

Least Flycatcher required mature forests that had open understory for sallying perches. They were common to abundant in closed canopy oak forests with an open understory. Birds almost always occurred in colonies with 4-6 males continuously singing. If we found less than one male, we assumed others in the area were simply taking a break. This species, more so than others, seems to sing strong at dawn for an hour, take a couple hour break or sing only intermittently and then have a second period of strong singing between 8:30 and 10:30.

#### Magnolia Warbler 6570

I found Magnolias in areas of middle age to mature forests with gaps that had Balsam Fir and in nearly mature Balsam Fir/White Spruce lowland areas with an aspen component. Bird aggressively responded to spishing after the count. One male was singing a Type 7 song (according to Warblers of North America CD) – a variant I had never heard before and sounded very much like a redstart (which also happened to occur at the site).

# **Mourning Dove MODO 3160**

Mourning Doves were common in open pine forest areas, on logging roads in drier aspen area, and throughout the brush openings in the Jack/ Red Pines of the Kirtland's Warbler area.

#### **Mourning Warbler MOWA 6790**

The "slashing or edge warbler", Mournings colonized areas that have under gone several years of regrowth, and have a well developed deciduous shrub/ground cover layer adjacent to deciduous or mixed forests. Although they don't require aspen suckers at the edges, they seem to prefer it. I also noted birds in areas that had Red Maple scrub interspersed with regenerating aspen.

#### Nashville Warbler NAWA 6450 - Special Concern

From Black Spruce/Tamarack bogs, to Red Pine plantations of all ages, Nashvilles are conifer generalists that seem to occur in just about any habitat that had some openings and brush associated with it. The two Tennessee Warblers that I got visual confirmation on were in areas surrounded by Nashvilles (also visual confirmation). In these areas, Nashvilles again proved to have very plastic songs as they/Tennessees seemed to be mimicking each other/competing for similar brush edges.

# Northern Harrier NOHA 3310 - SGCN/Special Concern

Northern Harriers were recorded at two different Kirtland's Warbler Sites. However, due to their close proximity, this may have been the same bird. "Both" were males flying over open Jack Pine/N. Pin Oak scrub.

#### Northern Parula NOPA 6480 - Special Concern

Northern Parulas were never common, but they were regularly encountered in the limited swamp conifer areas with White Cedar or other areas with some White Cedar, White Spruce and White Pine mixed in with a deciduous understory. They were often found with Black-throated Green, Blackburnian, Canada and Nashville Warblers, Hermit Thrush and American Robins.

#### Northern Waterthrush NOWA 6750

I heard a few waterthrushes in lowland deciduous areas – especially those with a Green or Black Ash component and standing water. Birds found defending fledglings/nestlings were always in areas with tipped up trees that likely served as nesting areas.

#### Olive-sided Flycatcher OSFL 4590 – SGCN/Special Concern

I detected at least 8 birds (two on point) at the edges of Black Ash Swamps/along beaver ponds just south of the eastern ½ of 43 road. I observed several individuals singing "Quick-Three Beers" from snags at the edge of these areas including one near the access gate on the far eastern end of 43 road.

#### Ovenbird OVEN 6740

The ubiquitous generalist of closed canopy forests, Ovenbirds were found in any habitat that had a roof over their heads. Sugar Maple monocultures and dry Quaking Aspen stands with no understory often had only a handful of individuals/species, but Ovenbirds were almost always present even in these low productivity habitats. They were almost always accompanied by Red-eyed Vireos and Veerys – in fact on the previous two mentioned habitats, these three were often the only birds present.

# Palm Warblers WPWA 6720

Palms were common in the few Black Spruce bogs I visited. In the Kirtland's Warblers areas, they were much more common than in 2010. This seems to be in response to the closing canopies and increase in ericaceous understory in the 20ft+ Jack/Red Plantation since last year.

#### Pileated Woodpecker PIWO 4050

Pileated Woodpeckers were again scattered in a variety of closed canopy forest habitats; especially those that had overmature Quaking Aspen that were crashing.

#### Pine Warbler PIWA 6710

Surrounding habitat does not seem to matter for Pine Warblers. As long as there were two-four mature/super canopy Red or White Pines, there would be a Pine Warbler. As I surveyed very limited habitat that met this description, I didn't fine many Pines in 2011.

# **Purple Finch PUFI 5170**

I found Purple Finches singing in the canopy and super canopy in a variety of jack pine/wet aspen/swamp hardwood areas.

#### Red-breasted Nuthatch RBNU 7280

I heard Red-breasted Nuthatches in most mature mixed-conifer forests as well as all conifer stands.

#### Red Crossbill RECR 5210 - SGCN

The only Red Crossbills I saw were on flyovers in areas that had scattered jack/red pines.

#### Red-eyed Vireo REVI 6240

Red-eyes were the most common bird in 2011 narrowly beating out Ovenbirds. They reached their highest densities in areas of canopied Quaking Aspen, but were also found in Red Oak and mixed forests. They were almost always found with Ovenbirds, Veerys, Rose-breasted Grosbeaks, and Scarlet Tanagers.

#### Red-tailed Hawk RTHA 3370

A single individual was seen on point. A few other birds were observed hunting over open areas with limited brush.

#### Red-winged Blackbird BWBL 4980

I found a few Red-wings around beaver ponds and along streams in alder thicket openings. They were also seen as flyovers in a number of plots.

#### Rose-breasted Grosbeak RBGR 5950

I found Rose-breasted Grosbeaks in just about any forested habitat. They seemed more common in deciduous forests with at least some aspen or birch component, and were encountered less frequently as the % of conifer increased.

## **Ruby-throated Hummingbird RTHI 4280**

I again found RTHums anyplace there were Yellow-bellied Sapsucker wells in open Sugar Maple forests. I also heard Saps call that I interpret to be warnings to "guard your sap" immediately after Hums flew by and gave their flight chatter.

# **Ruffed Grouse RUGR 4150**

Grouse were fairly common in young aspen stands in moist but not usually wet conditions. I also occasionally found females with their broods at the junction of aspen/oak habitats.

# Rufous-sided (Eastern) Towhee RSTO (EATO) 5870

I found towhees in just about every dry, open sites that had oak grubs or some conifers <15ft. Most birds were in the Kirtland Warbler Sites, but I also found them in other dry upland sites – especially in the Battle Axe Road Area.

#### Scarlet Tanager SCTA 6080

I regularly encountered Scarlet Tanagers in dry open Red and Northern Pin Oak/White Birch forests with limited understory as well as in open Sugar Maple/Hemlock stands. They were normally absent from forests that had a strong pine component, or that were exclusively Quaking Aspen.

#### Sedge Wren SEWR 7240

I heard Sedge Wrens in a number of open sedge meadows and on the open areas at the edge of beaver ponds.

#### Slate-colored Junco (Dark-eyed) SCJU 5670

Juncos were infrequently encountered in the Kirtland Warbler Sites in dry open habitats usually on the edge of young Jack Pine stands.

#### Song Sparrow SOSP 5810

Song Sparrows were common at the limited number of sites I surveyed with their preferred habitats of lowland brush, recent clear cuts and beaver pond openings. Scattered individuals were also located in willow clusters in open country areas in the Kirtland Warbler Sites.

#### Swainson's Thrush SWTH 7580 Special Concern

Swainson's Thrush seemed to need some Balsam Fir under and midstory with a bit of slope.

# **Swamp Sparrow SWSP 5840**

Swamp sparrows were found in lowland brush areas near beaver ponds – especially in the wetlands near 43 Road.

#### **Tennessee Warbler TEWA 6470**

I got visual confirmation on two Tennessee Warblers in the Bark River Area. Both birds were in open 40ft. Quaking Aspen on the edge of steep brushy slopes that ran down to flowing water. The birds were in areas also frequented by Nashville Warblers and the two species seemed to respond aggressively towards each other. This habitat is similar to the areas I found Tennessee Warblers in during the 2008 field season. Both males were singing in a way that suggested they may be unpaired as I found them late in the breeding season. They may just be birds that weren't in good enough shape to complete migration, or there may be a small population in the area. Regardless, these were the only two birds I heard/saw anywhere.

#### Veery VEER 7560 - SGCN/Special Concern

I again found Veerys at most closed canopy moist to wet deciduous forest points. They were most common in aspen dominated areas, but were also regularly encountered in oak forests and swamp conifer areas. They seemed to prefer sites that had little understory. Almost every site that had Ovenbirds and Red-eyed Vireos in numbers had Veerys as well. These three were often the only species found in 30-40ft young aspen monoculture.

#### Vesper Sparrow VESP 5400 SGCN/Special Concern

Vesper Sparrows were abundant in open grasslands and recent (even active) clearcuts that had not had time for vegetation to reestablish. They were a dominant species in the Kirtland's Warbler sites along with Towhees, Thrashers, and Clay-colored Sparrows.

#### Whip-poor-will WPWI 4170 – SGCN/Special Concern

Whip-poor-wills were common in clear cuts and dry open Jack Pine and Northern Pin Oak forests. I saw birds calling from roads on most morning while driving to my first point of the day. On one occasion, I witnessed a red fox grab a bird off the side of the road.

#### White-breasted Nuthatch WBNU 7270

White-breasted Nuthatches replaced Red-breasted Nuthatches as I moved from mixed conifer to Red Oak forests. Although not common, I encountered White-breasteds on a regular basis in these stands.

#### White-throated Sparrow WTSP 5580

I found White-throated Sparrows on a variety of edge habitats with moist to wet conditions. They were especially common in lowland areas near beaver ponds, in recent aspen clear cuts, and in Tamarack and Black Spruce Bogs.

#### White-winged Crossbill WWCR 5220 Special Concern

A single male flyover was the only bird I saw.

#### Winter Wren WIWR 7220

Birds were present in most lowland conifer areas with closed canopy. They were especially common in areas with White cedar and in moist Hemlock stands.

#### Wild Turkey WITU 4160

The three gobblers I heard were all on the edge of the Kirtland's Warbler Area in areas that had Northern Pin Oak scrub or trees.

#### Wood Thrush - SGCN/Special Concern

Wood Thrush was a rare bird except in moist but not wet lowland hardwood areas that had green/black ash and limited brush.

#### Yellow-bellied Flycatcher 4630 Special Concern

Yellow-bellied Flycatchers were regularly encountered in open swamp conifer stands, lowland brush scattered with Tamarack and spruce and in monotypic Black Spruce bogs. Interestingly, I did not find any in the Kirtland's Warbler Areas this year.

#### Yellow-bellied Sapsucker YBSA 4020

I again found sapsuckers in Sugar Maple, White Birch and Quaking Aspen forests. They were especially abundant in pure Sugar Maple stands with open understories.

#### Yellow-billed Cuckoo YBCU 3870 SGCN/Special Concern

I was pleasantly surprised to find more than a few Yellow-billed Cuckoos in the Bark River Drainage (10+ birds?). They were often distant, but all areas seemed to have willow scrub present and were moist to wet with>50, but <80% canopy cover. I noticed that much of the area was marked for harvest. Allowing a couple hundred meter extra buffer strip of unlogged habitat near the river may preserve the majority of this extralimital bird's habitat.

# Yellow-rumped (Myrtle) Warbler MYWA 6550

I surveyed in limited "Butterbutts" habitat this year. Birds were again found in the Kirtland's Warbler Sites in young (20ft+) Red and Jack Pine plantations and in mature Tamarack/Black Spruce Bogs.

# Yellow-shafted Flicker YSFL 4120

Flickers were observed in a variety of habitats. They were especially common in aspen areas near clearings where they could forage for ants, and in the Kirtland's Warbler Sites.

# Yellow-throated Vireo YTVI 6280

I only found Yellow-throated Vireos in the more mesic Red Oak forests (especially heavy oak selective cuts with scattered overstory trees and regenerating brush) and a few Sugar Maple forests with a strong oak component. If there was water located near the point, it added to the likelihood of these birds holding territory.

# Yellow Warbler YWAR 6520

I only saw two Yellow Warblers all June – both were found in a Kirtland's Warbler Site that was a dry upland area with dense willow clusters and scattered oak grubs.

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